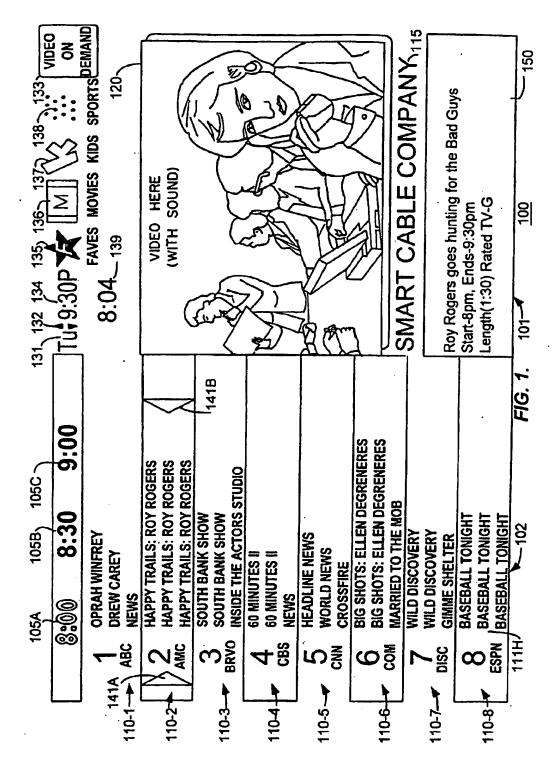
®\RESPONSE/		Application Number	09/458,796
0 2004 FRANSMITTAL		Filing Date	12/9/99 J 25 M
FORM		First Named Inventor	Donald F. Gordon
to be used for all correspondence after in	itial filing)	Group Art Unit	2611
· ·		Examiner Name	Huynh, Son P.
otal Number of Pages In This Submission	34	Attorney Docket Number	TVG/245CIP3
F	ESPONSE	ENCLOSURES (check all that a	apply)
Fee Transmittal Form		ment Papers Application)	After Allowance Communication to Group
☐ Fee Attached	□ Drawin	g(s) - 32 SHEETS	Appeal Communication to Board of Appeals and Interferences
Amendment / Response NOTICE TO FILE CORRECTED APPLICATION PAPERS	Licens	ing-related Papers	Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
copy attached) After Final		n Routing Slip (PTO/SB/69)	Proprietary Information
Affidavits/declaration(s)		n to Convert to a ional Application	Status Letter
Extension of Time Request		of Attorney, Revocation e of Correspondence Address	Other Enclosure(s) (please identify below):
Express Abandonment Request		nal Disclaimer est for Refund	
Information Disclosure Statement	CD, N	umber of CD(s)	·
Certified Copy of Priority Document(s)	Rema	arks	
Response to Missing Parts/ Incomplete Application			
Response to Missing Parts under 37 CFR 1.52 or 1.53			
SIGNA	TURE OF	APPLICANT, ATTORNEY,	OR AGENT
Firm or Individual name  EAMON J. WALL			·
Signature 6/10/2	U		
Date 9/7/	 r <b>u</b> /		







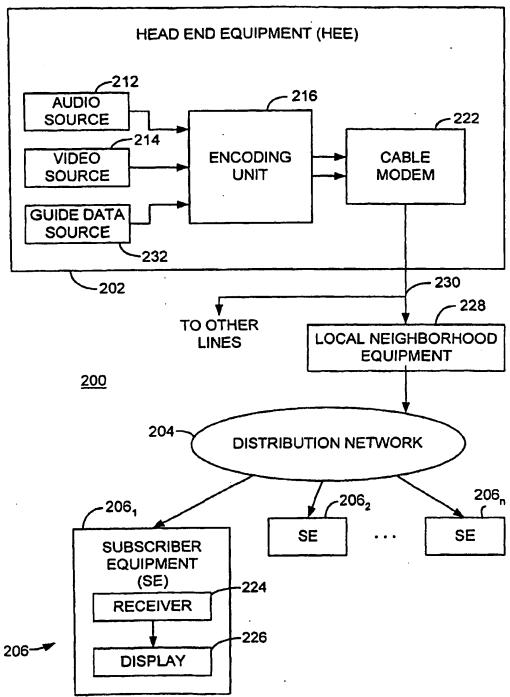


FIG. 2.



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_	<u></u>	
	SLICE 1 (g/s1)	SLICE 1 (v/s1)
Ţ	SLICE 2 (g/s2)	SLICE 2 (v/s2)
	·	
	•	•
100-	•	•
·		
		,
	SLICE N (g/sN)	SLICE N (v/sN)
	102 -	101-4

FIG. 3.



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216 400 **VIDEO PROCESSOR** 408 **ENCODER** 406 UNIT .. COMPOSITOR VIDEO . - 410 UNIT **VIDEO** TO CABLE MODEM - 412 222 **AUDIO** AUDIO -404 CONTROLLER 402

FIG. 4.

GUIDE

**ENCODER** 

416

418

SPLICE-FORM

**GRID PAGE** 

**DATABASE** 

**GRAPHICS PROCESSOR** 

**GUIDE DATA** 

**GRID** 

**GENERATOR** 

GUIDE

DATA

414



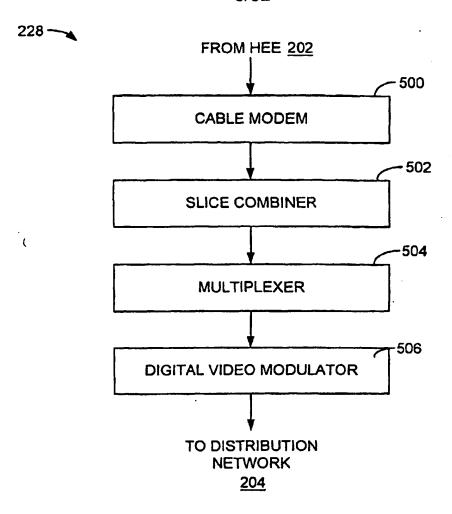
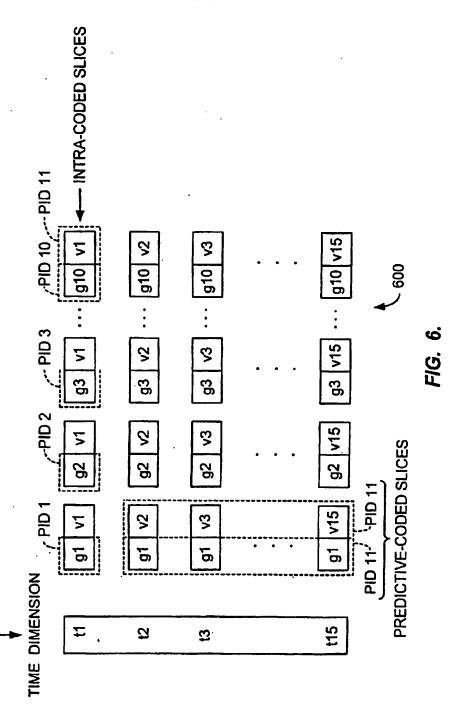


FIG. 5.



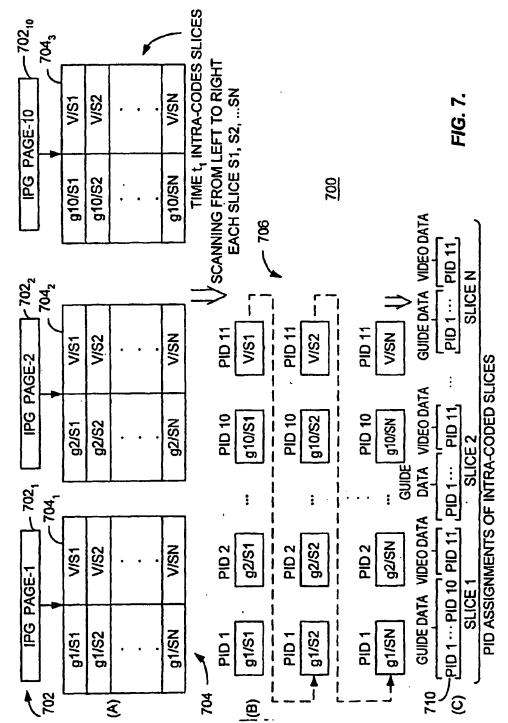
PID DIMENSION

Serial No. 09/458,796, filed 12/09/1999
Donald F. Gordon, et al., Inventors
Attorney Docket No.: 19880-00720 (TVG/245CIP3)
Earaon J. Wall, Attorney
Telephone: 732-530-9404



SP 10 2004

Serial No. 09/458,796, filed 12/09/1999 Donald F. Gordon, et al., Inventors Attorney Docket No.: 19880-00720 (TVG/245CIP3) Eamon J. Wall.: Attorney Telephone: 732-530-9404





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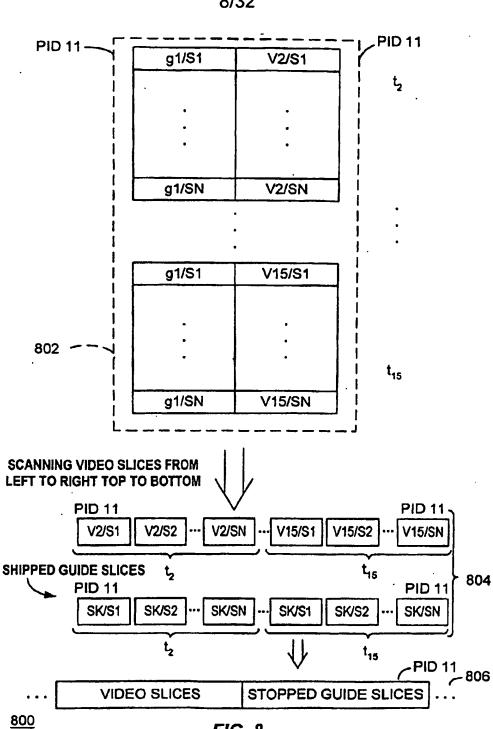


FIG. 8.



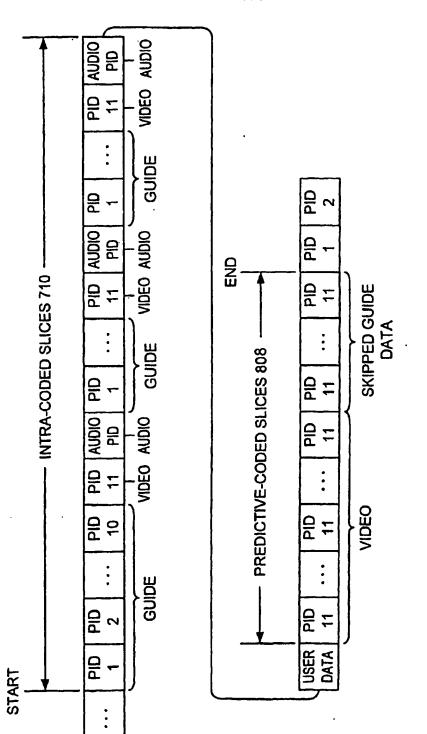
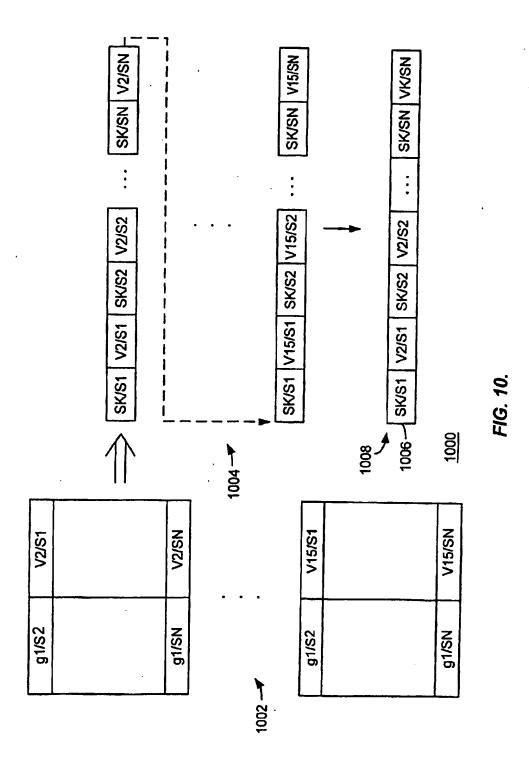


FIG. 9.









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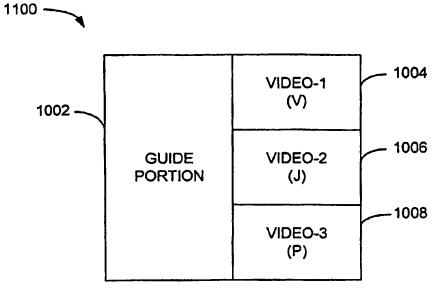


FIG. 11A.

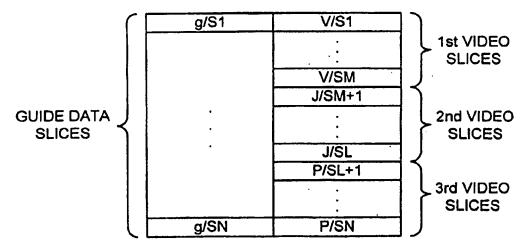


FIG. 11B.



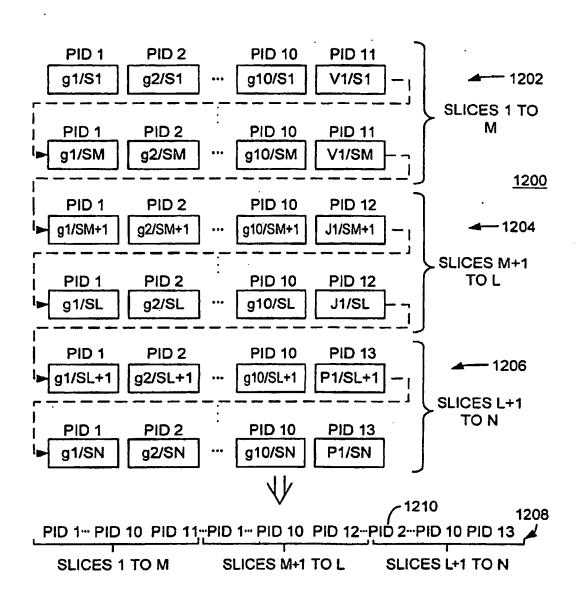
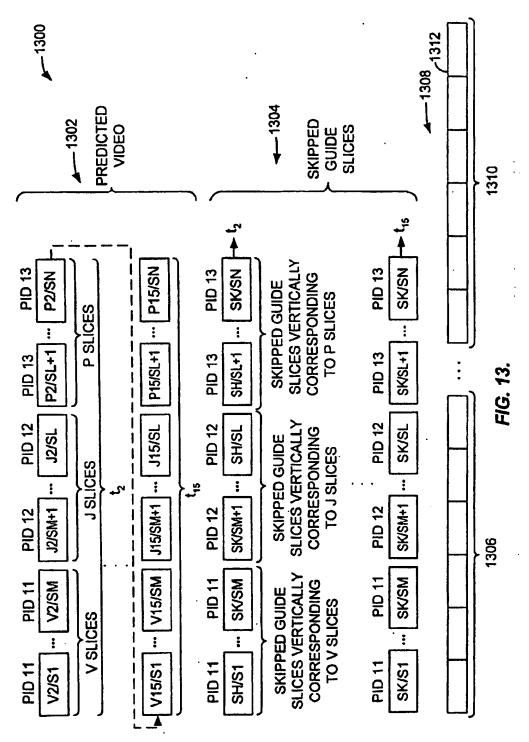


FIG. 12.

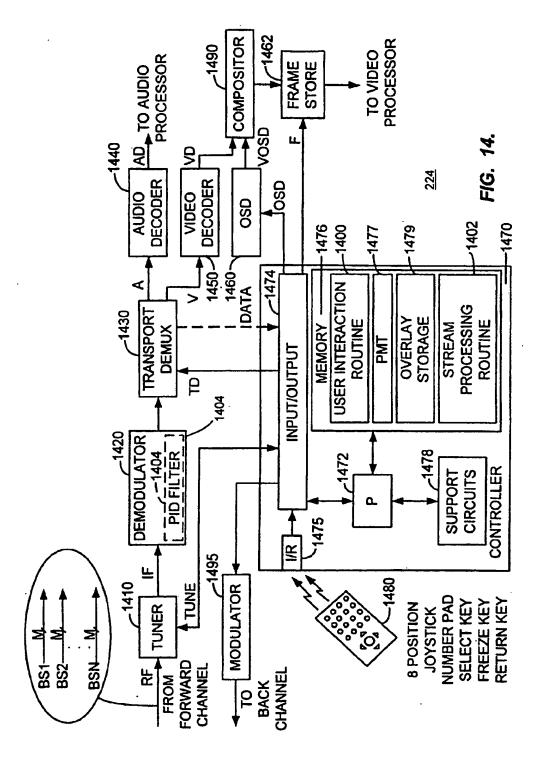


Serial No. 09/458,796, filed 12/09/1999 Donald F. Gordon, et al., inventors Attorney Docket No.: 19880-00720 (TVG/245CIP3)

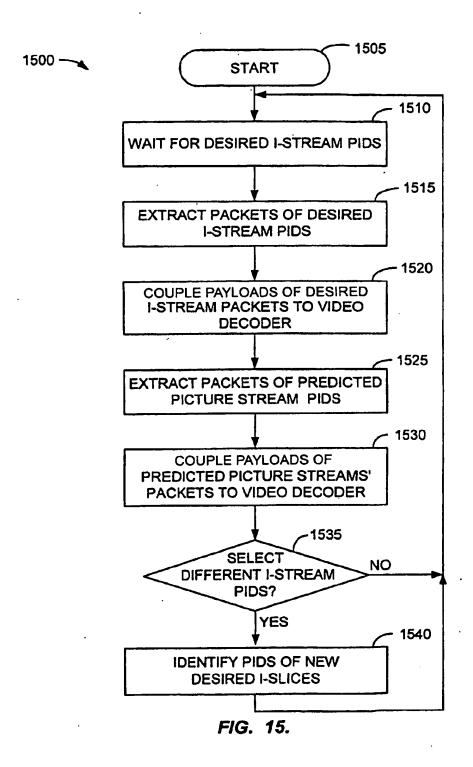
Eamon J. Wall, Attorney Telephone: 732-530-9404



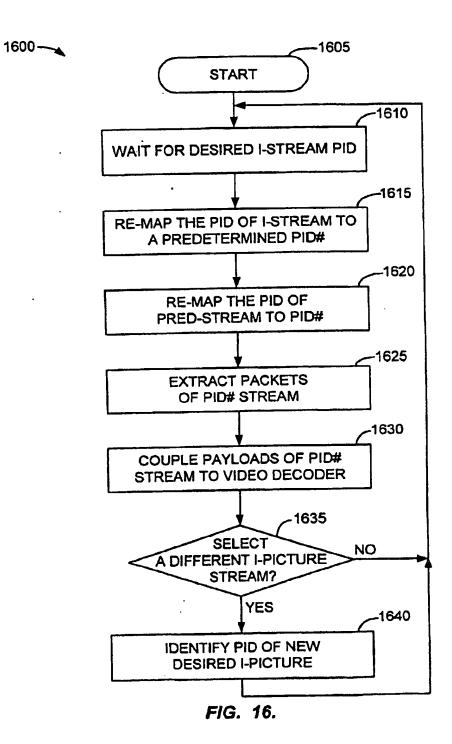




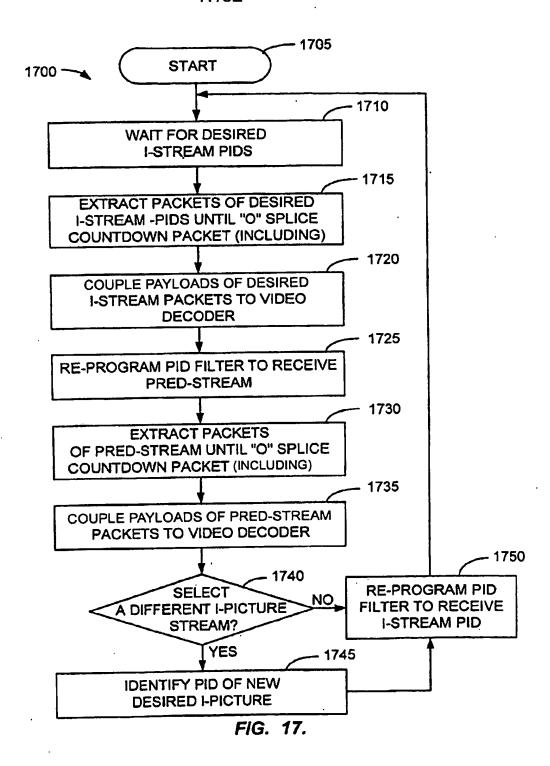














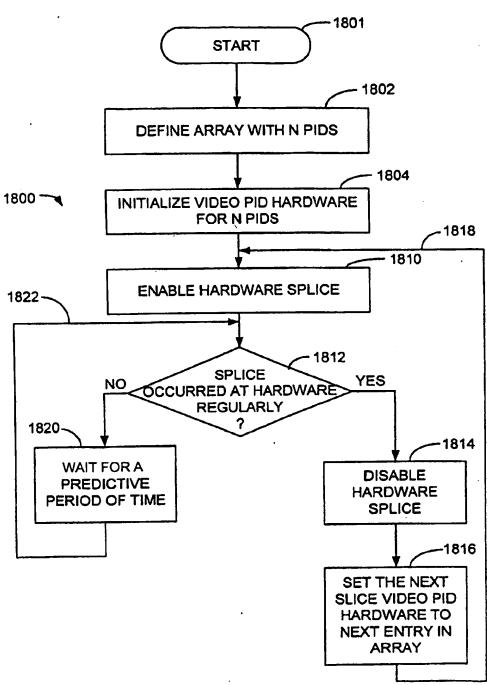


FIG. 18.



-1900		0	INTRA-CODED GUIDE AND VIDEO	ODED GUII	INTRA-C		
K1/SN	M1/SN	V1/SN	g10/SN	NS/66	NS/66 NS/66	g2/SN	g1/SN
				•	•	•	•
		٠	•			•	•
			•	•		•	
K1/S3	M1/S3	V1/S3	g10/S3	£S/66	g3/S3 g9/S3	g2/S3	£ g1/S3
K1/S2)	M1/S2	V1/S2	g10/S2	g9/S2	g3/S2 - g9/S2	g2/S2	Sg1/S2
K1/S1)	M1/S1	V1/S1	g10/S1	g9/S1	g3/S1	g2/S1	g1/S1
PID 13	PID 12	PID 11	PID 10	6 Old	PID 3	PID 2	PID 1
						_	



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PID 13	K2/SN	K3/SN 2004	K4/SN	•	•		K15/SN	
PID 12	M2/SN	M3/SN	M4/SN	. •	•	•	M15/SN	
PID 11	V2/SN	V3/SN	V4/SN	•	•	•	K15/S2 V15/SN	
PID 13	K2/S2	K3/S2	K4/S2		•	•	K15/S2	
PID 12	M2/S2	M3/S2	M4/S2	•	•		M15/S2	
PID 41	V2/S2	V3/S2	V4/S2	•	•		V15/S2	
PID 13	K2/S1	K3/S1	K4/S1	•	•	•	K15/S1	
PID 12	M2/S1	M3/S1	M4/S1	•			M15/S1	
PID 11	V2/S1	V3/S1	V4/S1	•	•	•	V15/S1	
IME	. 74	, gr	<del></del>	_			9	

FIG 20

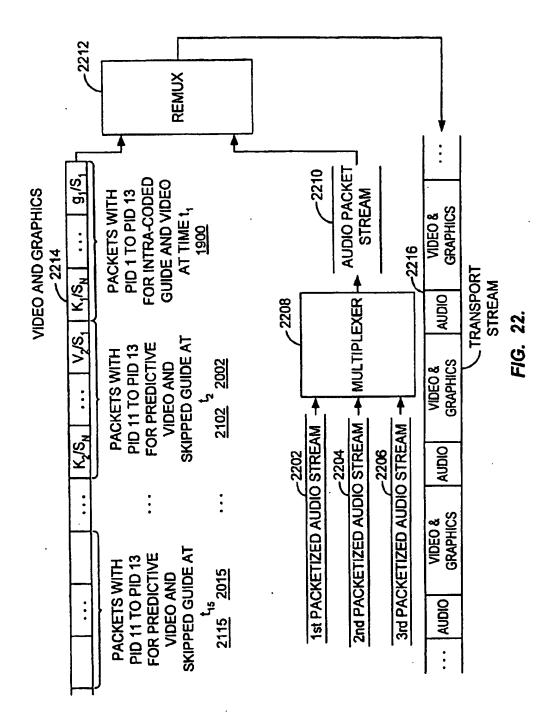
PREDICTED VIDEO



	9			SKIPPED GUIDE	SKIPP				
SK/SN	SK/SN	SK/SN	SK/S2	SK/S2	SK/S2	SK/S1	SK/S1	SK/S1	5
		•	•	•		•	•	•	
•	. •	•	•	•	•	•	•	•	
						•		•	
SK/SN	SK/SN	SK/SN	SK/S2	SK/S2	SK/S2	SK/S1	SK/S1	SK/S1	
SK/SN SK/SN 2104	SK/SN	SK/SN	SK/S2	SK/S2	SK/S2	SK/S1	SK/S1	SK/S1	_
SK/SN	SK/SN	SK/SN	SK/S2	SK/S2	SK/S2	SK/S1	SK/S1	SK/S1	••
PID 13	PID 12	PID 11	PID 13	PID 12	PID 11	PID 13	PID 12	PID 11	IME









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0,/5,	 O <sub>3</sub> /S <sub>N</sub>	O <sub>6</sub> /S <sub>N+1</sub>	 O <sub>6</sub> /S <sub>2N</sub>	O <sub>0</sub> /S <sub>2N+1</sub>		Og/S <sub>3N</sub>
0,/5,	 O <sub>2</sub> /S <sub>N</sub>	O <sub>5</sub> /S <sub>N+1</sub>	 O <sub>5</sub> /S <sub>ZN</sub>	O <sub>g</sub> /S <sub>2N+1</sub>	•	O <sub>g</sub> /S <sub>3N</sub>
0,/5,	 O <sub>4</sub> /S <sub>N</sub>	O4/SN41	 O <sub>4</sub> /S <sub>2N</sub>	0,/S2N+1		O <sub>7</sub> /S <sub>3N</sub>

SLICE-BASED PARTITIONING

FIG. 23.

03	90	°0
02	°°0	<sup>8</sup> 0
<sup>t</sup> o	<sup>*</sup> O	6

OBJECTS (A)



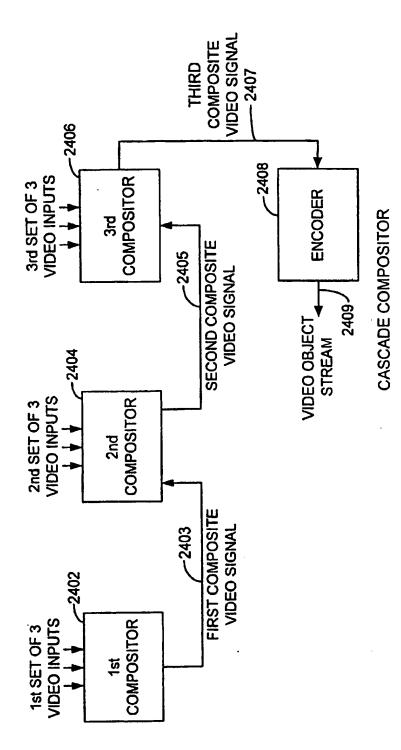
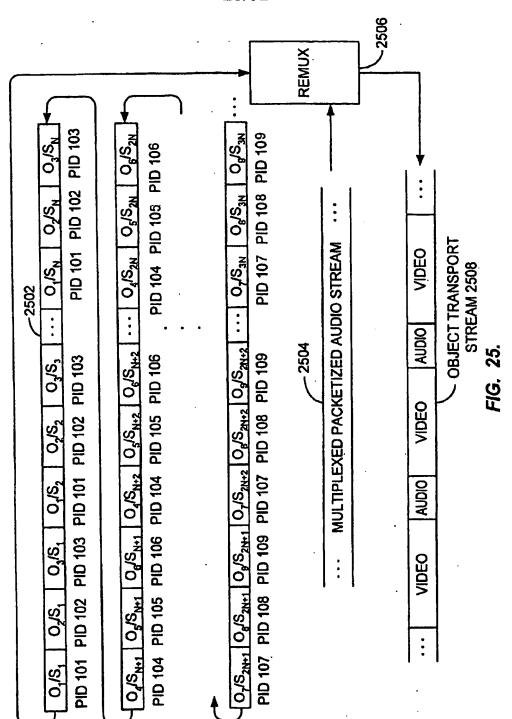
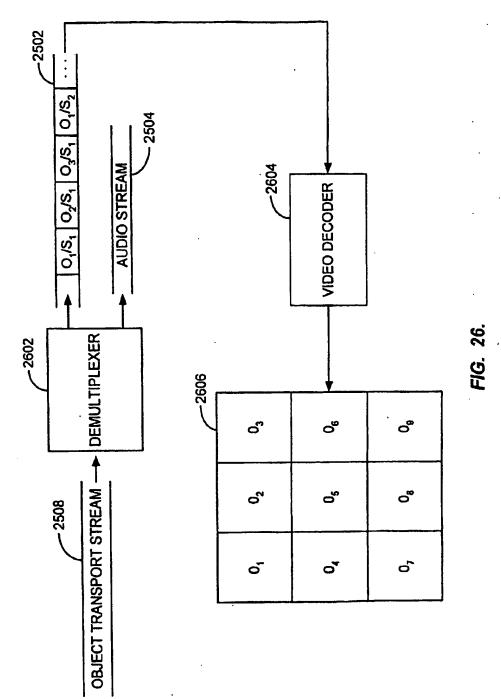


FIG. 24.

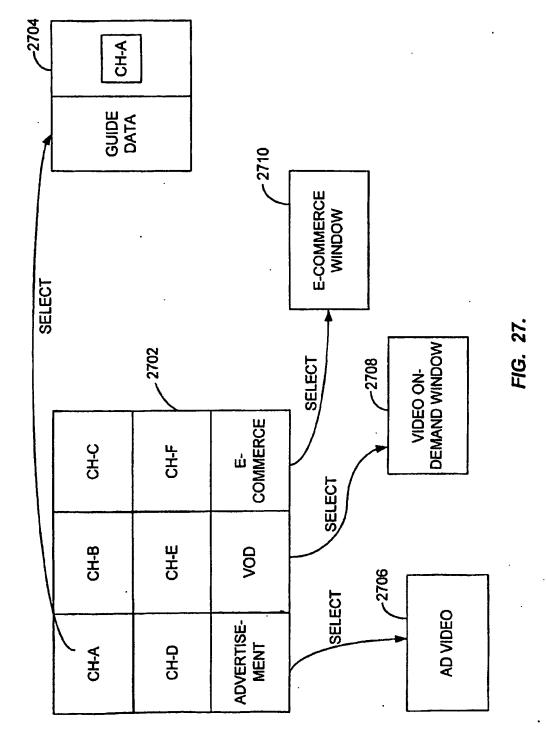




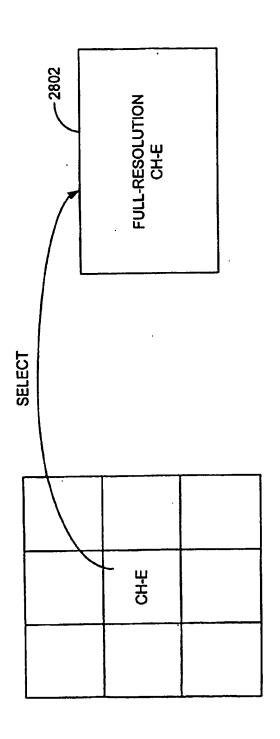














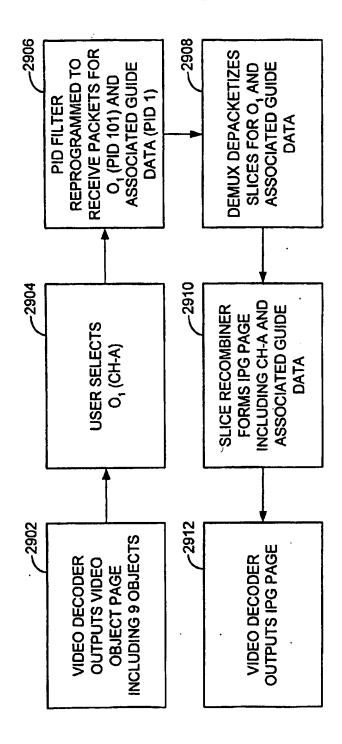
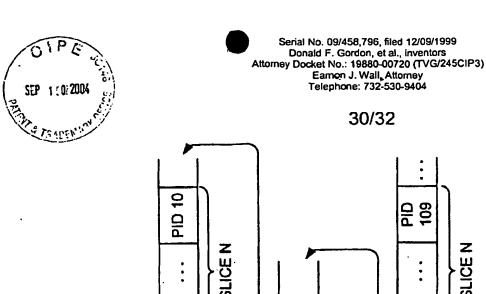


FIG. 29.



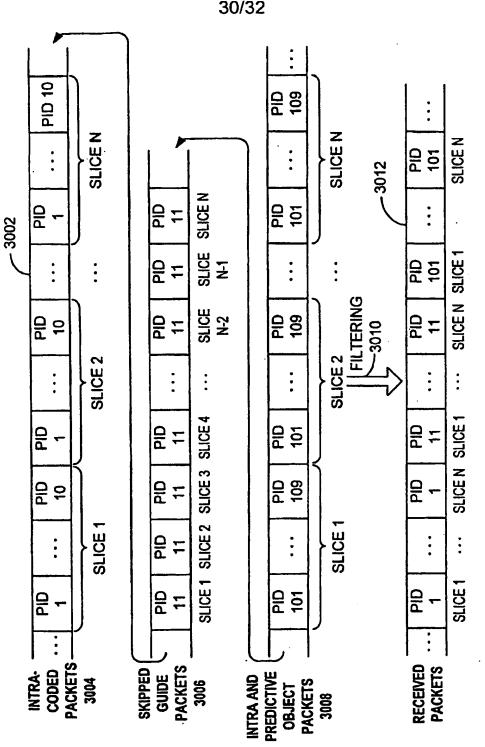


FIG. 30.



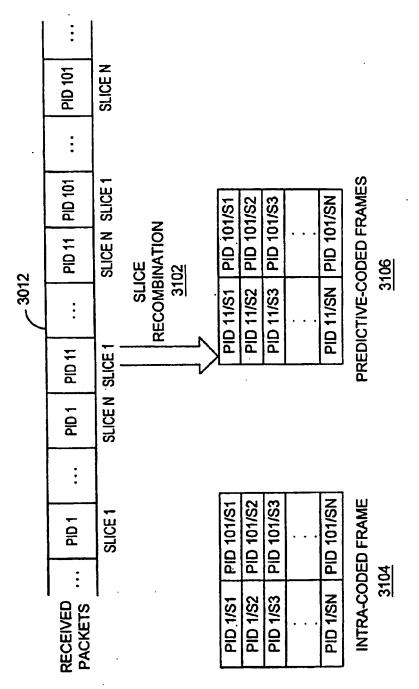


FIG. 31.

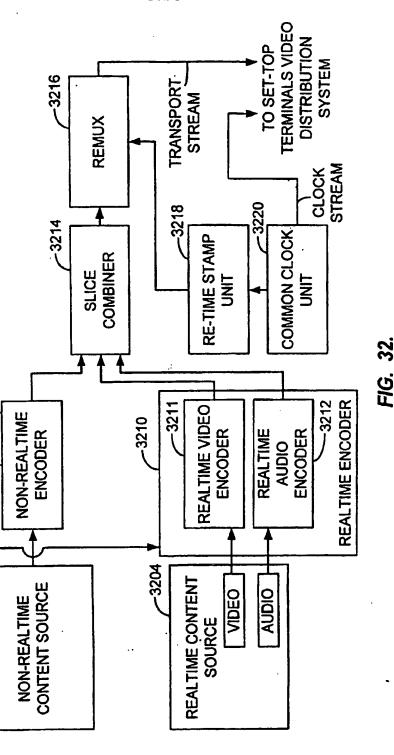
SEP 1 0 2004

3206

RATE CONTROL

FINA S

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Telephone: 732-530-9404



RE-TIMESTAMPING AND RATE CONTROL APPARATUS